Thermophysical Property Database of Liquids and Gases

Y.K. Vinogradov, V.I. Lopatin, and V.S. Yargin
International University of Engineering
Moscow, Russia

Information technology development substantially changes reference book publishing, distribution and application. Registering thermophysical experiment results in the form of a database can be easily expanded and modified. Service programs of the data computer processing give wider possibilities to a reference book user. The Web-server database application makes it available for scientists and specialists all over the world.

Thermophysical Property Database of Liquids and Gases is developed by the authors on the basis of the Handbook of Physical Properties of Liquids and Gases, Pure Substances and Mixtures, N.B. Vargaftic, Y.K. Vinogradov, V.S. Yargin published in 1996 by Begell House Inc. U.S.A., (1300 pages in volume). For development the relation Visual FoxPro 5.0 and OLE-technologies were used. A complete database integration is provided in the form of Microsoft family annex and a fast search of the data a user is interested in.

The database includes convenient service abilities: a user can execute a thermophysical property search by substance groups or the properties selected, look through a whole table or any part of is chosen, perform data selections by a single or several criteria from the tables, represent the data selected in the form of tables and charts in different measurement units, make interpolation of table values, make replacement and modification of initial data, display the references the authors referred to in composing the tables.